

Notice of Allowability

Application No.

09/711,956

Examiner

Shefali D. Patel

Applicant(s)

MIYAKE, NOBUTAKA

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to response filed on 12/12/05.
2. ☒ The allowed claim(s) is/are 1,7-11,13-21,27-31 and 33-42.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>2/22/06</u> . |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>7/29/05</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

ALLOWANCE

Response to Arguments

1. Claims 26, 12, 22-26 and 32 are cancelled.
2. Applicant's arguments, see Remarks (on pages 13-15), filed on 12 December 2005, with respect to claims 1, 10, 21, 30, and 41-42 have been fully considered and are persuasive. The rejection of these claims has been withdrawn.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Brian L. Klock (Reg. No., 36,570) on 22 February 2006.

The application has been amended as follows:

Please cancel claims 43 and 44.

Allowable Subject Matter

4. Claims 1, 7-11, 13-21, 27-31, 33-42 are allowed and re-numbered as 1-30.
5. The following is an examiner's statement of reasons for allowance:

The instant invention defines a method and apparatus, which embeds additional information in an image. The claimed invention distinguishes over the prior art by the manner in which the quantization means performs. The claimed combination allows for improving a method of embedding additional information in an image.

Art Unit: 2621

Embedding additional information in an image is conventional in the art. However, the prior art of record fails to teach quantization means embedding the additional information by using threshold different from a threshold used when not embedding additional information in a partial area in the inputting image, and quantization means periodically arranging the area which use the threshold different from the threshold used when not embedding the additional information, and quantization means embedding the additional information by changing a combination of the horizontal period and the vertical period used when arranging the area as recited in claims 1, 21 and 41. The prior art of record also fails to teach transformation means for executing frequency transformation on the image, classification means for classifying the image into plural classes based on the transformation process of the transformation means, calculation means for calculating a feature amount of each class based on a conversion coefficient of the classified class, comparison means for relatively comparing sizes of the feature amounts of the calculated classes and extracting means for extracting the additional information based on a comparison result as recited in claims 10, 30 and 42. These elements in combination with all of the other elements of the claims are not taught or fairly suggested in the prior art of record. The dependent claims 7-9, 11, 13-20, 27-29, 31 and 33-40 are allowed for the same reasons.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shefali D. Patel whose telephone number is 571-272-7396. The examiner can normally be reached on M-F 8:00am - 5:00pm (First Friday Off).

Art Unit: 2621

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shefali D Patel
Examiner
Art Unit 2621

22 February 2006

JINGGEWU
PRIMARY EXAMINER

A large, stylized handwritten signature in black ink, likely belonging to Jingge Wu, is written over the printed name and title.